

WHAT IS CLAIMED IS:

1. A method of network acquisition for a cellular radio communications device arranged to operate on a plurality of radio technologies and comprising  
5 determining the most suitable cell based on a characteristic of signals received from a plurality of cells, the signals from each cell being provided over a band of frequencies, and the method being arranged for taking a series of measurements of the said characteristic for one radio technology and for each frequency, wherein prior to the final measurement in the said series, the said  
10 characteristic of at least one measured signal for each frequency is compared with a predetermined value and if the comparison indicates that the radio technology is unlikely to produce a suitable cell, the step of switching to an alternative radio technology prior to the said final measurement in the series being taken and searching signals associated with the alternative radio  
15 technology to search for a suitable cell.
2. A method as claimed in Claim 1 and including the steps of searching on the alternative radio technology in the same manner as searching on an original radio technology.
3. A method as claimed in Claim 1 or 2, wherein the characteristic of  
20 the received signals is compared with the predetermined value after the first measurement in the series of measurements to be taken so as to obtain an average value.
4. A method as claimed in Claim 1, 2 or 3, wherein the said predetermined value is set in the cellular radio communications device.
- 25 5. A method as claimed in any one of Claims 1-4, wherein the said predetermined value is set for each radio technology.
6. A method as claimed in any one of Claims 1-5, wherein the said characteristic of the signals comprises signal strength.
7. A method as claimed in any one of Claims 1-5, wherein the said

characteristic of the signals comprises a derivative of the signal strength.

8. A method as claimed in any one of Claims 1-7, and including the steps of continuing with the averaging sequence on a radio technology even if it is determined that no suitable cell is likely to be identified.

5 9. A method as claimed in any one of Claims 1-8 and arranged for use in accordance with a dual mode, or multimode, device.

10 10. A cellular radio communications device arranged for operation on a plurality of radio technologies and including means for determining the most suitable cell based upon a characteristic of signals received from a plurality of cells and the signals from each cell being provided over a band frequencies, means for taking a series of measurements of the said characteristic for one radio technology for each frequency, and including means for, prior to the final measurement in the said series being taken, comparing the said characteristic of at least one measured signal for each frequency with a predetermined value and  
15 determining that, if the comparison indicates that the radio technology is unlikely to produce a suitable cell, initiating means for switching to an alternative radio technology prior to the said final measurement in the series, and for searching signals associated with the alternative radio technology to search for a suitable cell.

20 11. A device as claimed in Claim 10 and arranged to operate in accordance with the method of any one of Claims 2-9.

12. A method of network acquisition for a cellular radio communications device and substantially as hereinbefore described with reference to, and as illustrated in, the accompanying drawing.

25 13. A cellular radio communications device substantially as hereinbefore described with reference to, and as illustrating in, the accompanying drawing.

14. A method of network acquisition for a cellular radio communications device arranged to operate on a plurality of radio access

technologies and comprising determining the most suitable cell based on a characteristic of signals received from a plurality of cells, the signals from each cell being provided over a band of frequencies, and the method being arranged for taking a series of measurements of the said characteristic for one radio  
5 access technology and for each frequency, wherein prior to the final measurement in the said series, the said characteristic of at least one measured signal for each frequency is compared with a predetermined value and if the comparison indicates that the radio access technology is unlikely to produce a suitable cell, the step of switching to an alternative radio access technology prior  
10 to the said final measurement in the series being taken and searching signals associated with the alternative radio access technology to search for a suitable cell.

15. A cellular radio communications device arranged for operation on a plurality of radio access technologies and including means for determining the  
15 most suitable cell based upon a characteristic of signals received from a plurality of cells and the signals from each cell being provided over a band frequencies, means for taking a series of measurements of the said characteristic for one radio access technology for each frequency, and including means for, prior to the final measurement in the said series being taken, comparing the said  
20 characteristic of at least one measured signal for each frequency with a predetermined value and determining that, if the comparison indicates that the radio access technology is unlikely to produce a suitable cell, initiating means for switching to an alternative radio access technology prior to the said final measurement in the series, and for searching signals associated with the  
25 alternative radio access technology to search for a suitable cell.